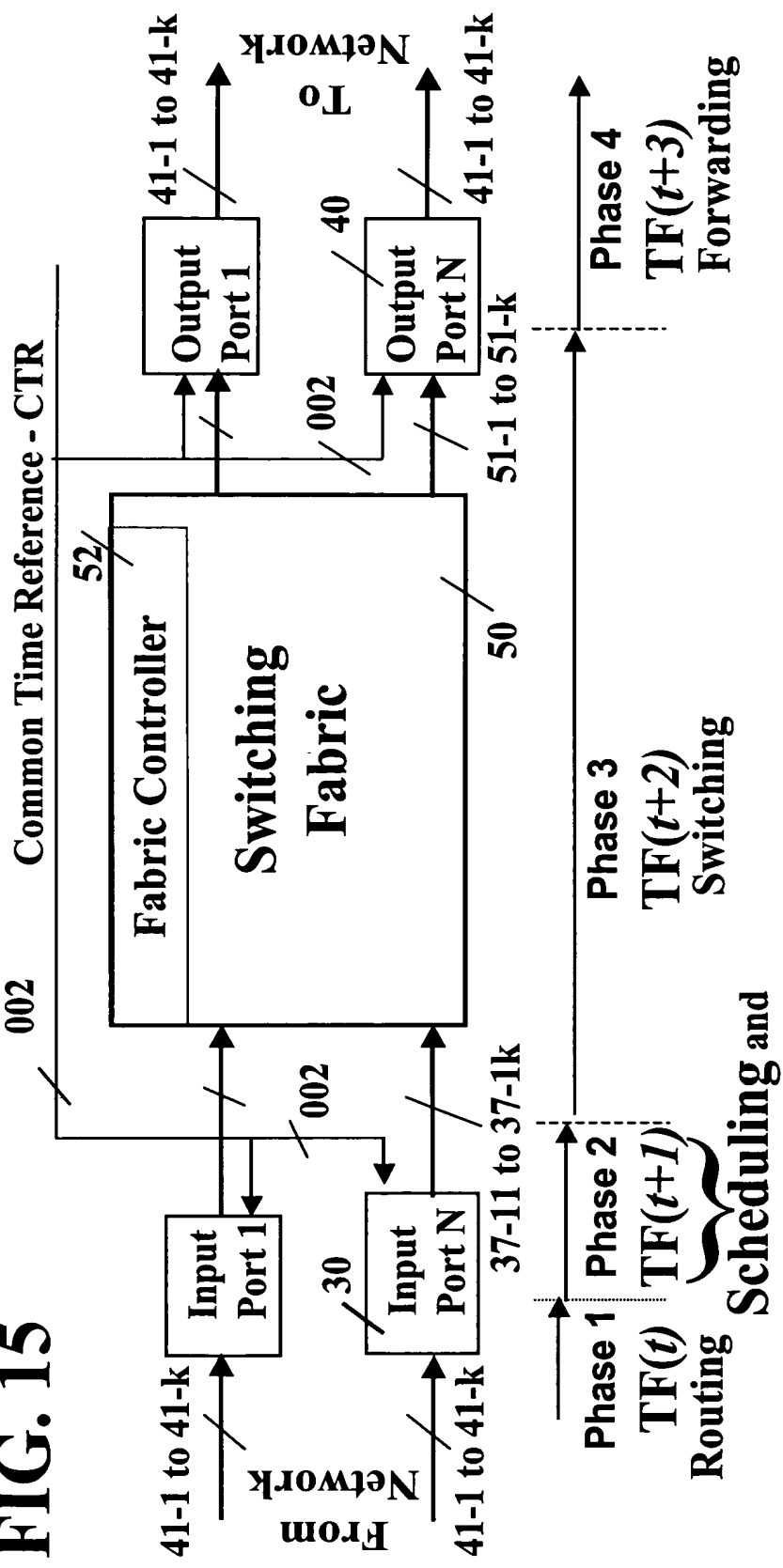
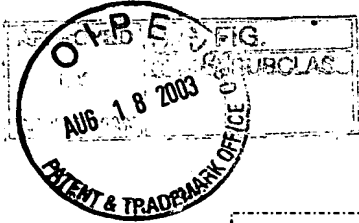


**FIG. 15**



possibly more TFs  
for rescheduling of:  
VBR and "Best Effort" - after receiving  
Input reject message 63

# FIG. 25



FAST switching - Fabric controller - switching matrices -

$M(i,j,t)$  - for every time slot:

$t$  - is defined by the triplet:  $\begin{cases} -s - \# \text{ of slot positions in time frame} \\ -f - \# \text{ of frame positions in time cycle} \\ -c - \# \text{ of cycle positions in super cycle} \end{cases}$

[Total number of switching matrices -  $M(i,j,t)$  -  $s*f*c$ ]

2510

Matrix  $M(i,j,t)$ , such that,  $1 \leq t \leq s*f*c$  : 4 output ports -  $j$

4 input ports - $i$			
	output-1	output-2	output-3
input-1			
input-2		value,type	
input-3			
input-4			

value=0 - disconnect input port from output port  
 value=1 - connect input port to output port  
 type =0 - temporary value in this switching matrix  
 type =1 - permanent value in this switching matrix

2500

**FIG. 26**

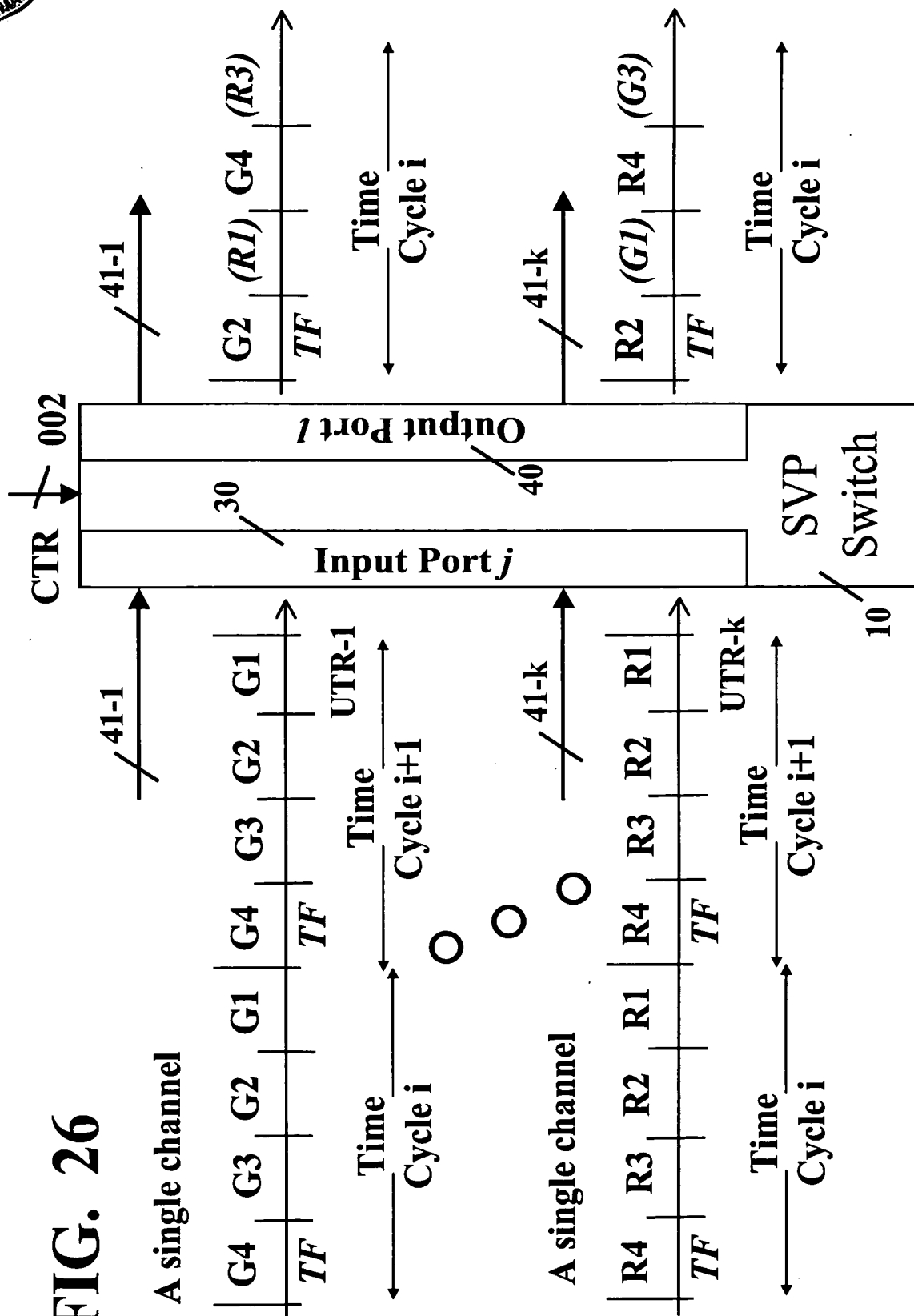
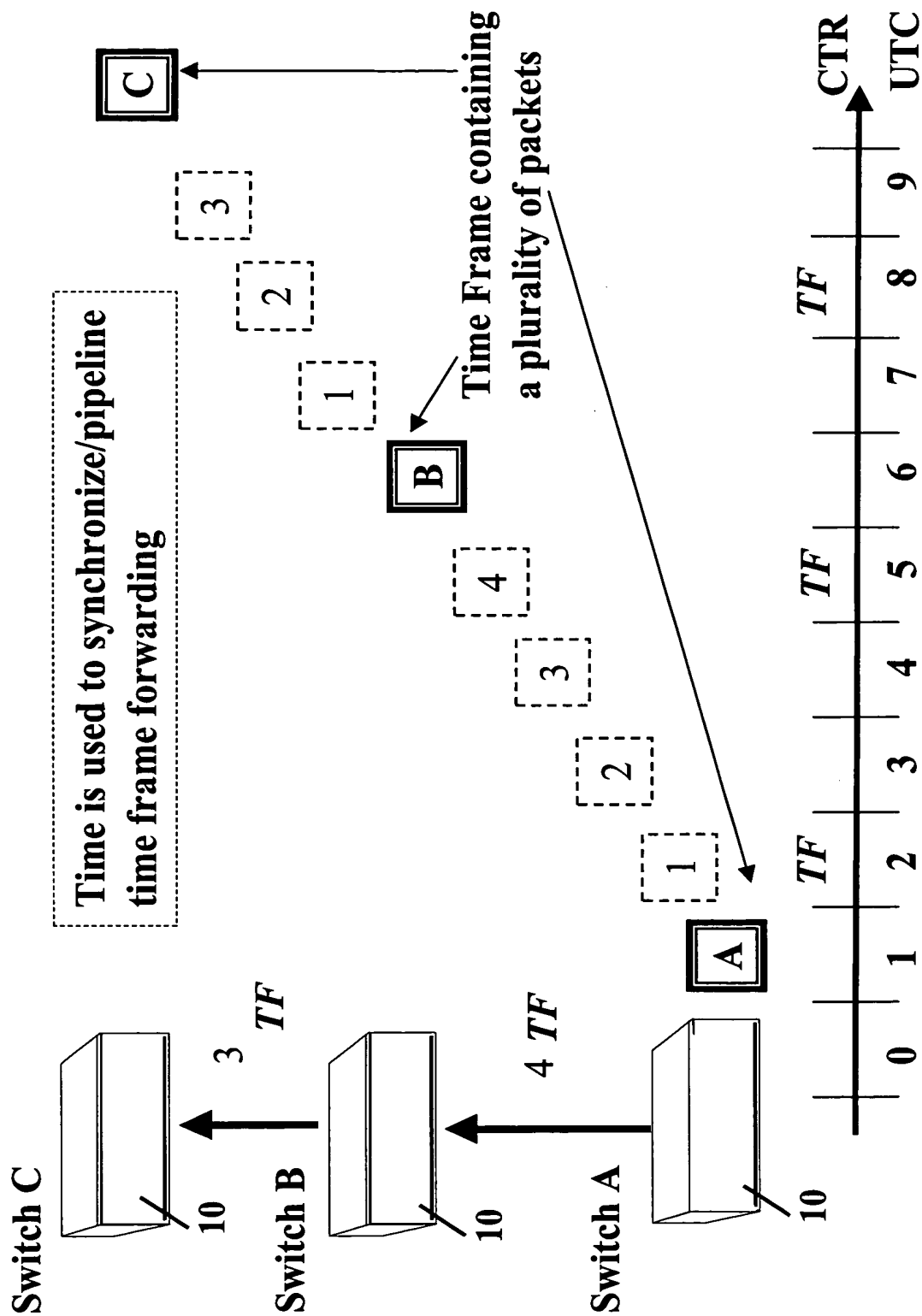
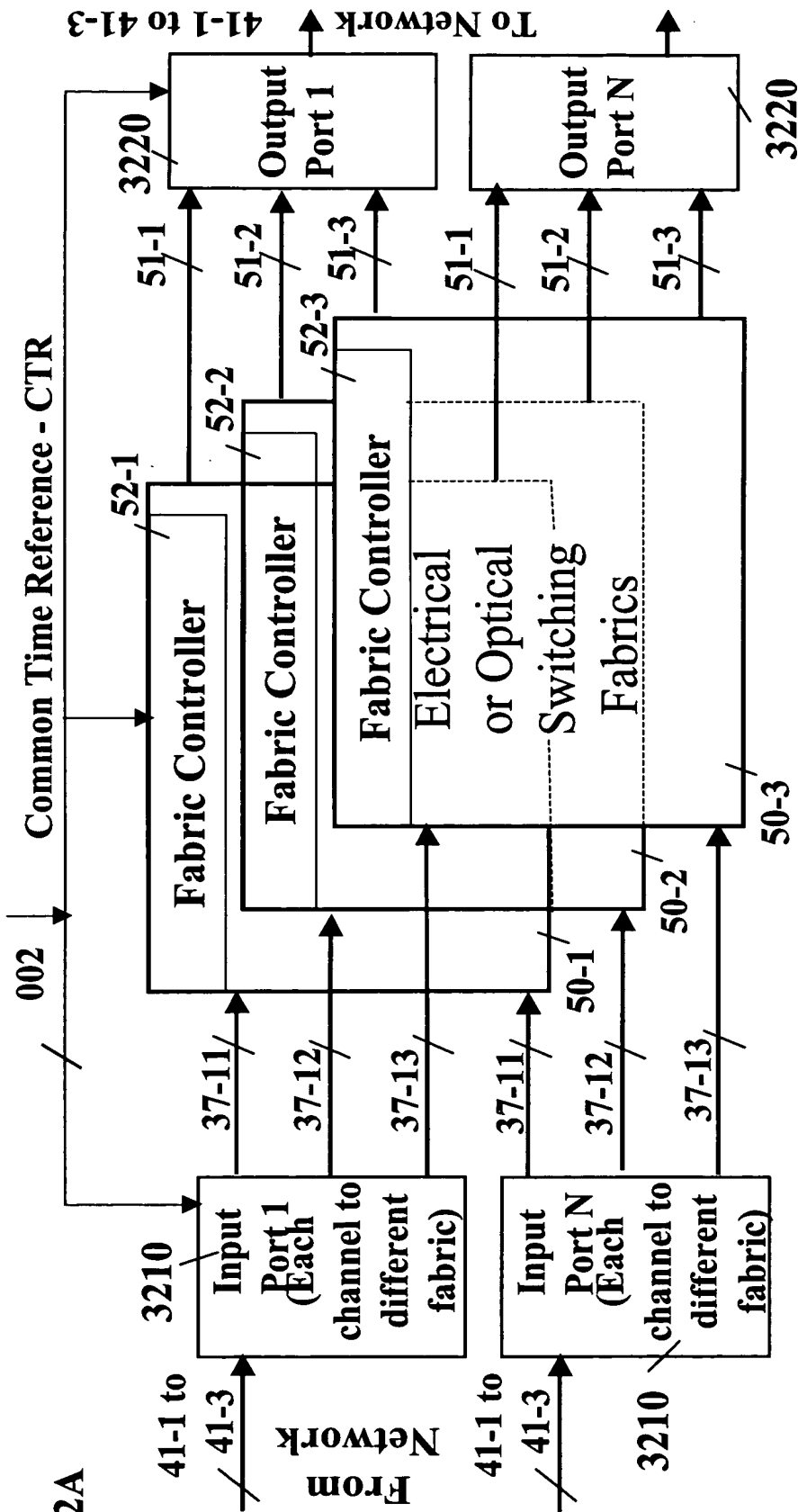


FIG. 28



**FIG. 32A**



**FIG. 32B**

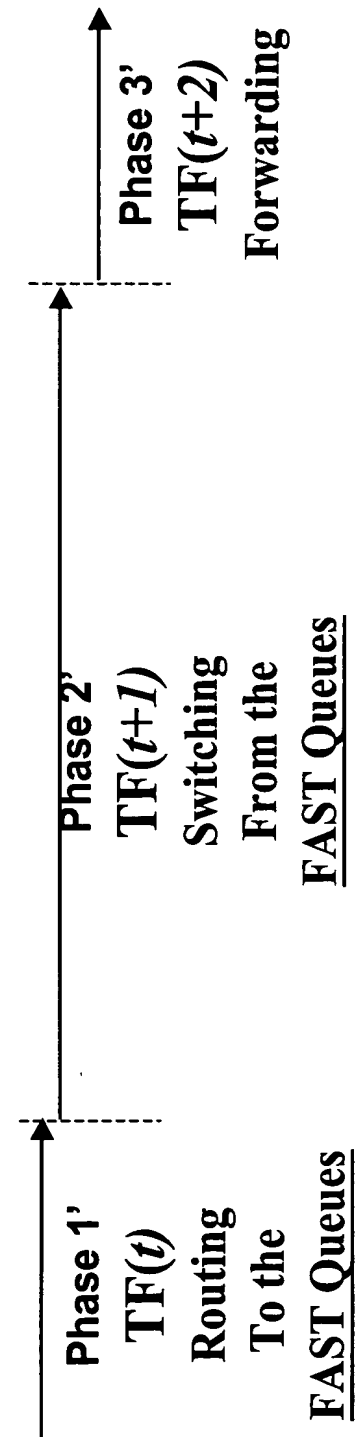


FIG. 33A

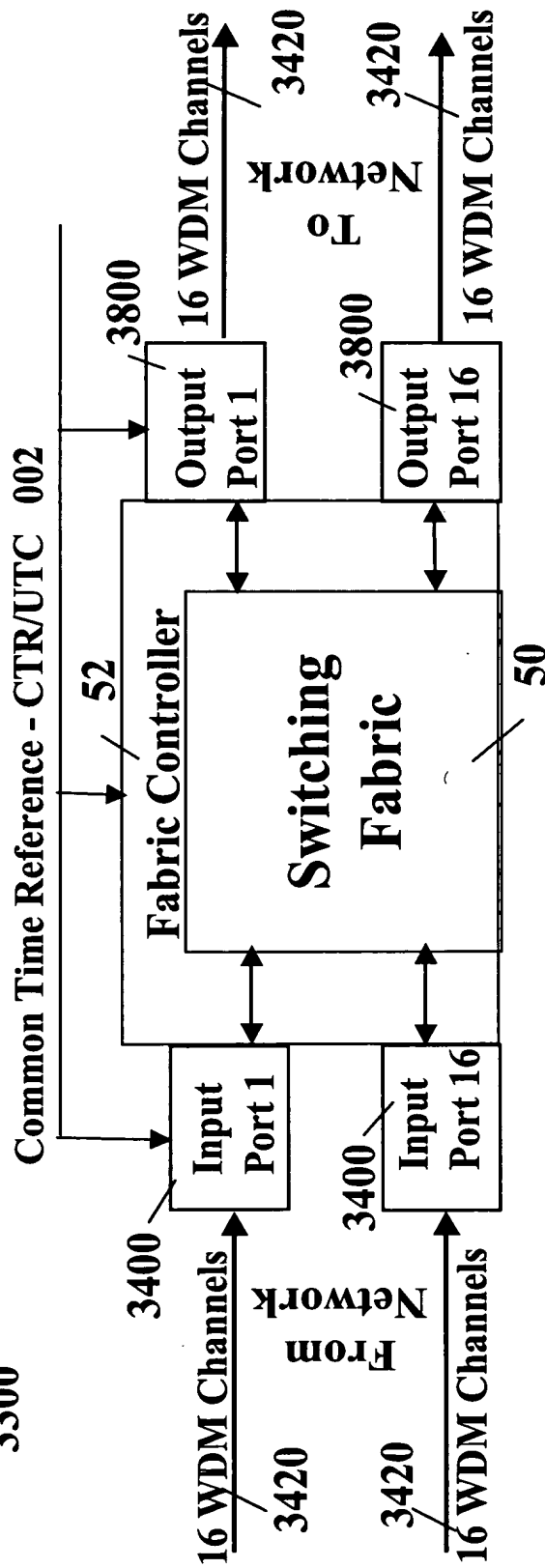
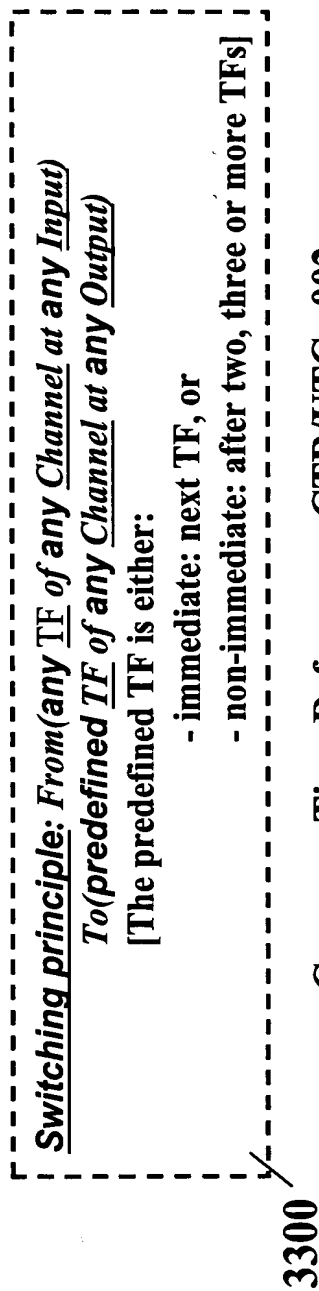


FIG. 33B

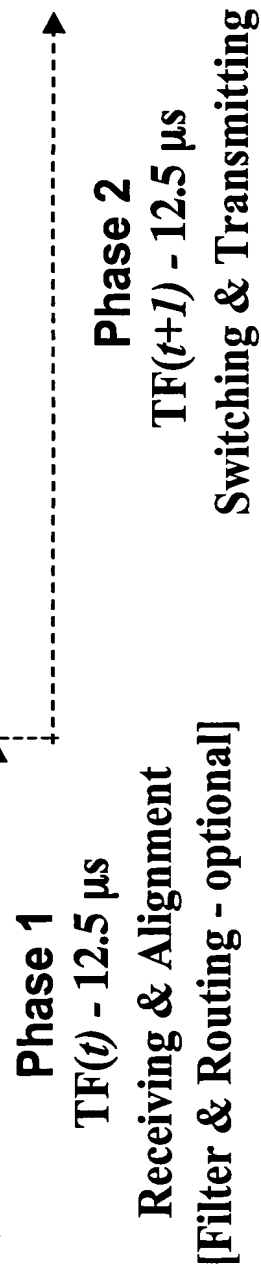
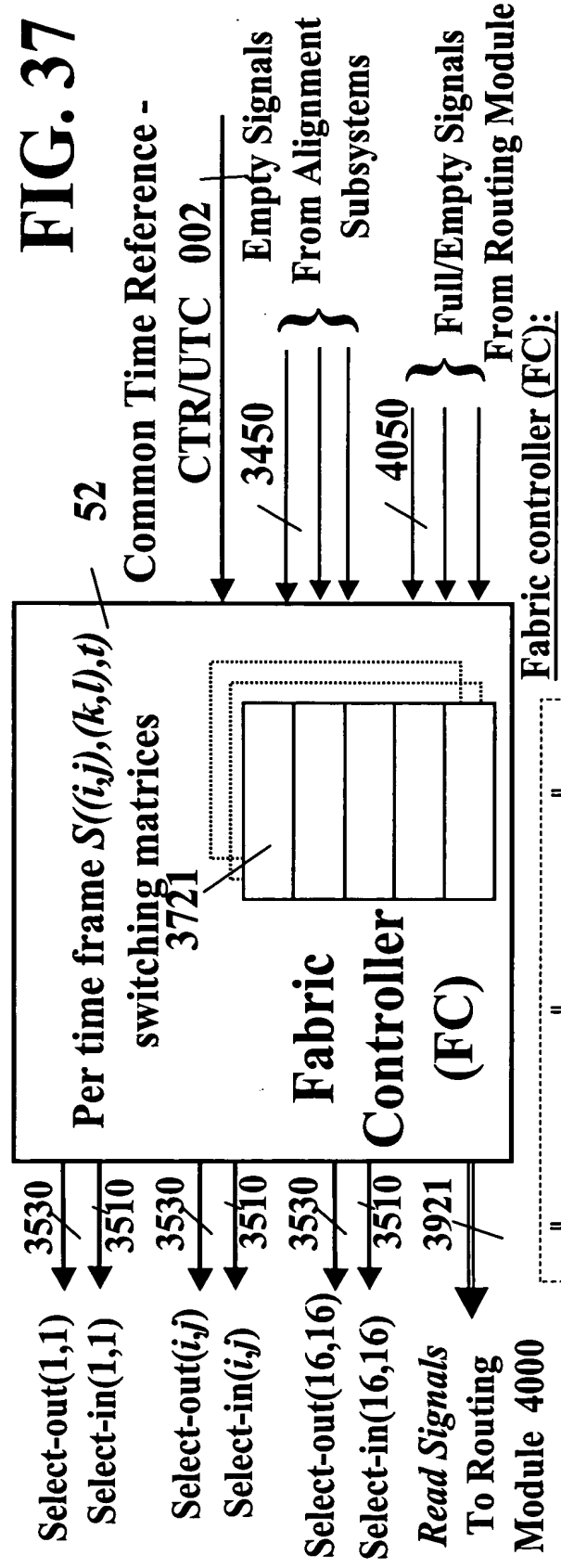
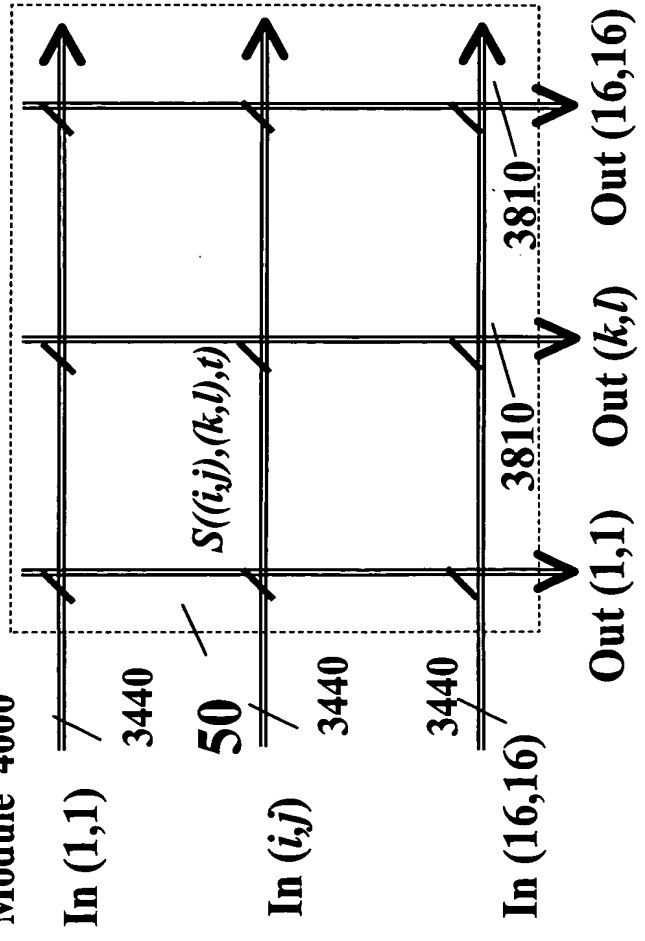


FIG. 37



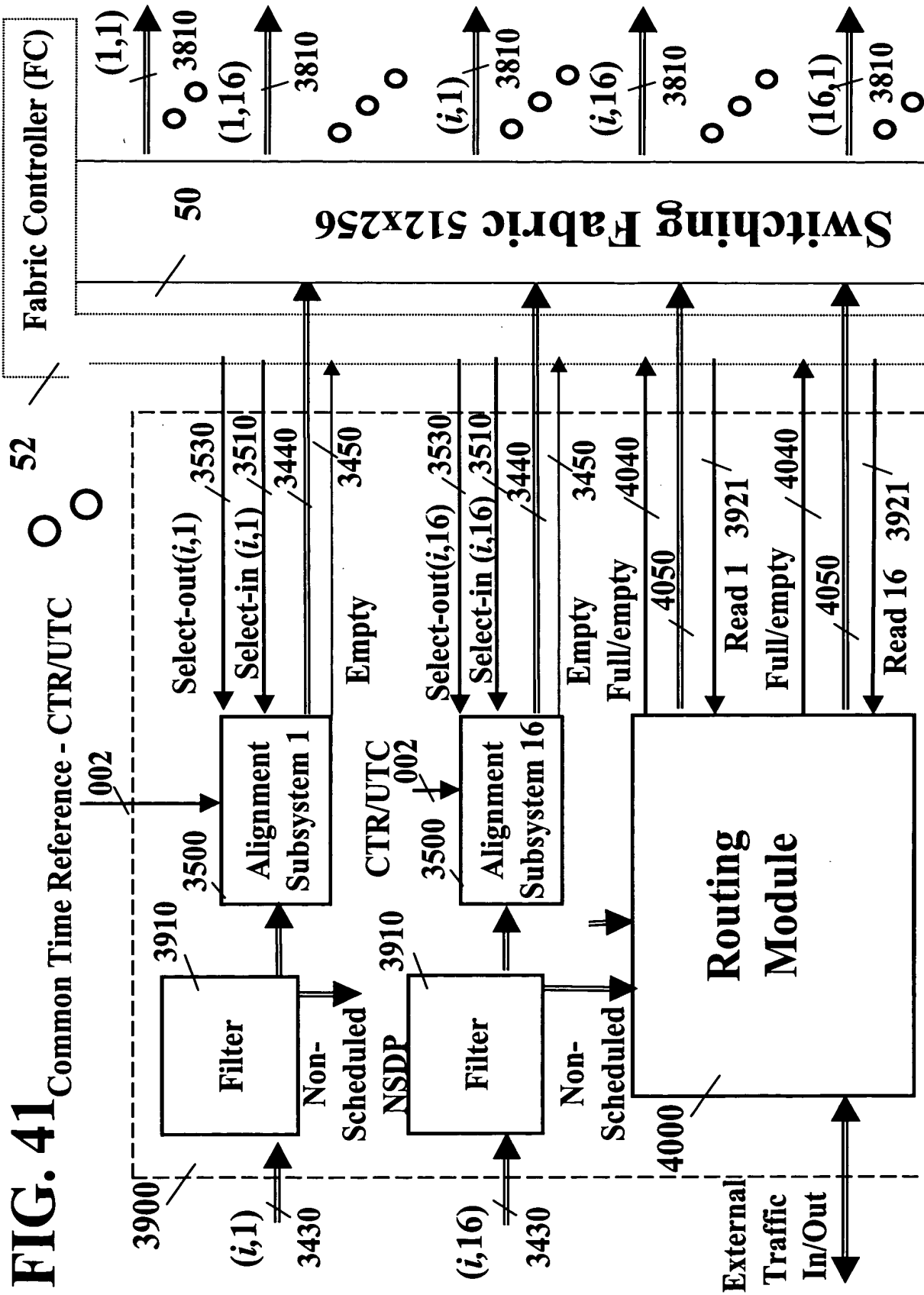
Fabric controller (FC):

- $S((i,j),(k,l),t)$  - switching matrix for every time frame in each time cycle and super cycle, the matrix defines which input channel  $i,j$  should be connected to output channel  $k,l$  in time frame  $t$ , where  $S((i,j),(k,l),t)=1$ :
- 1. At every time frame an input channel can be connected to one or more output optical channels (multicast - MCST)
  - 2. At every time frame an output optical channel can be connected to at most one input optical channel



**FIG. 41**

Common Time Reference - CTR/UTC

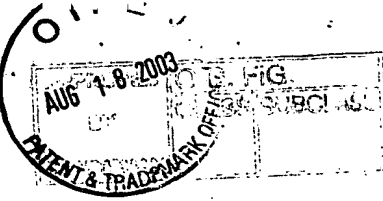
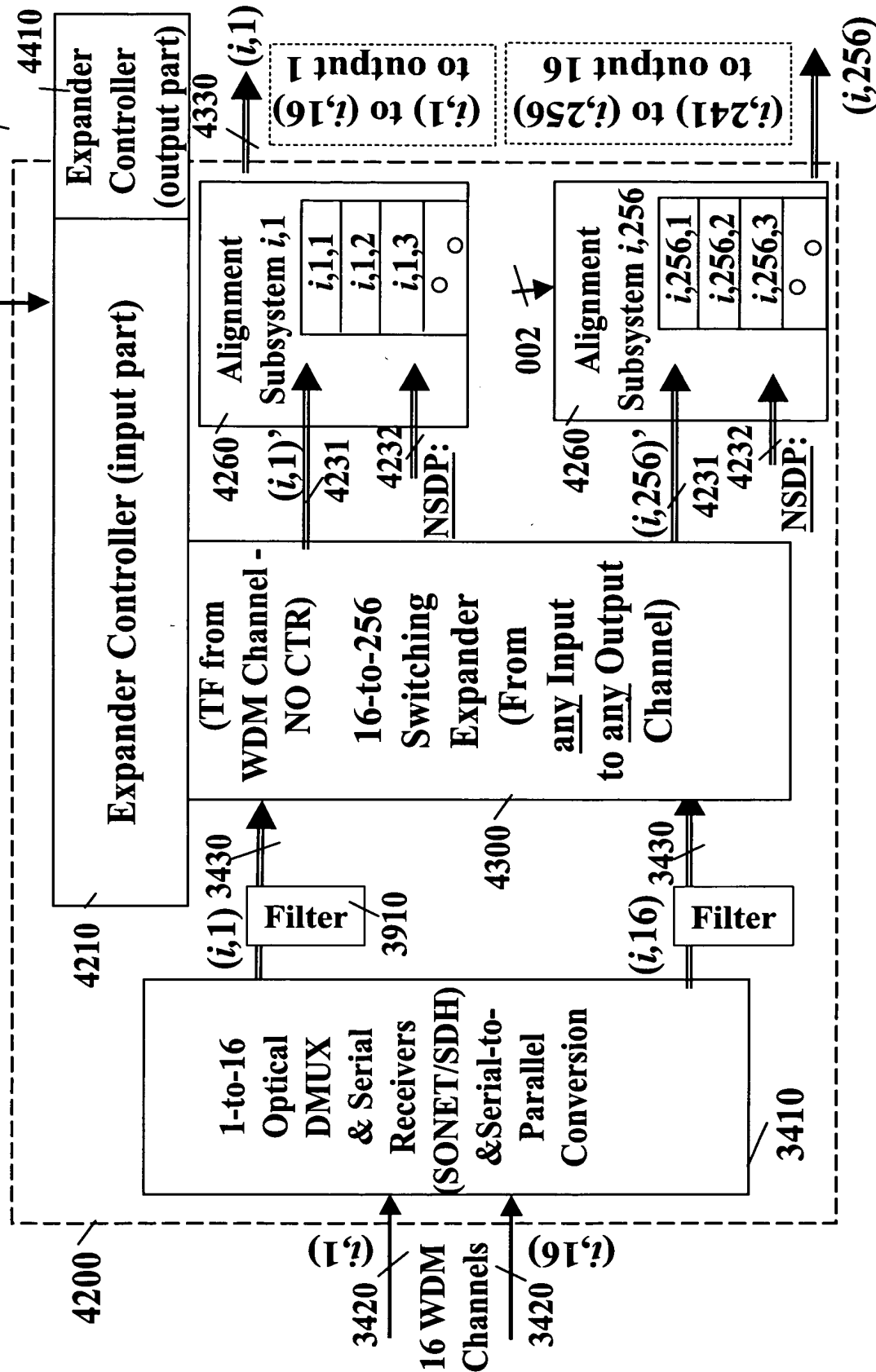




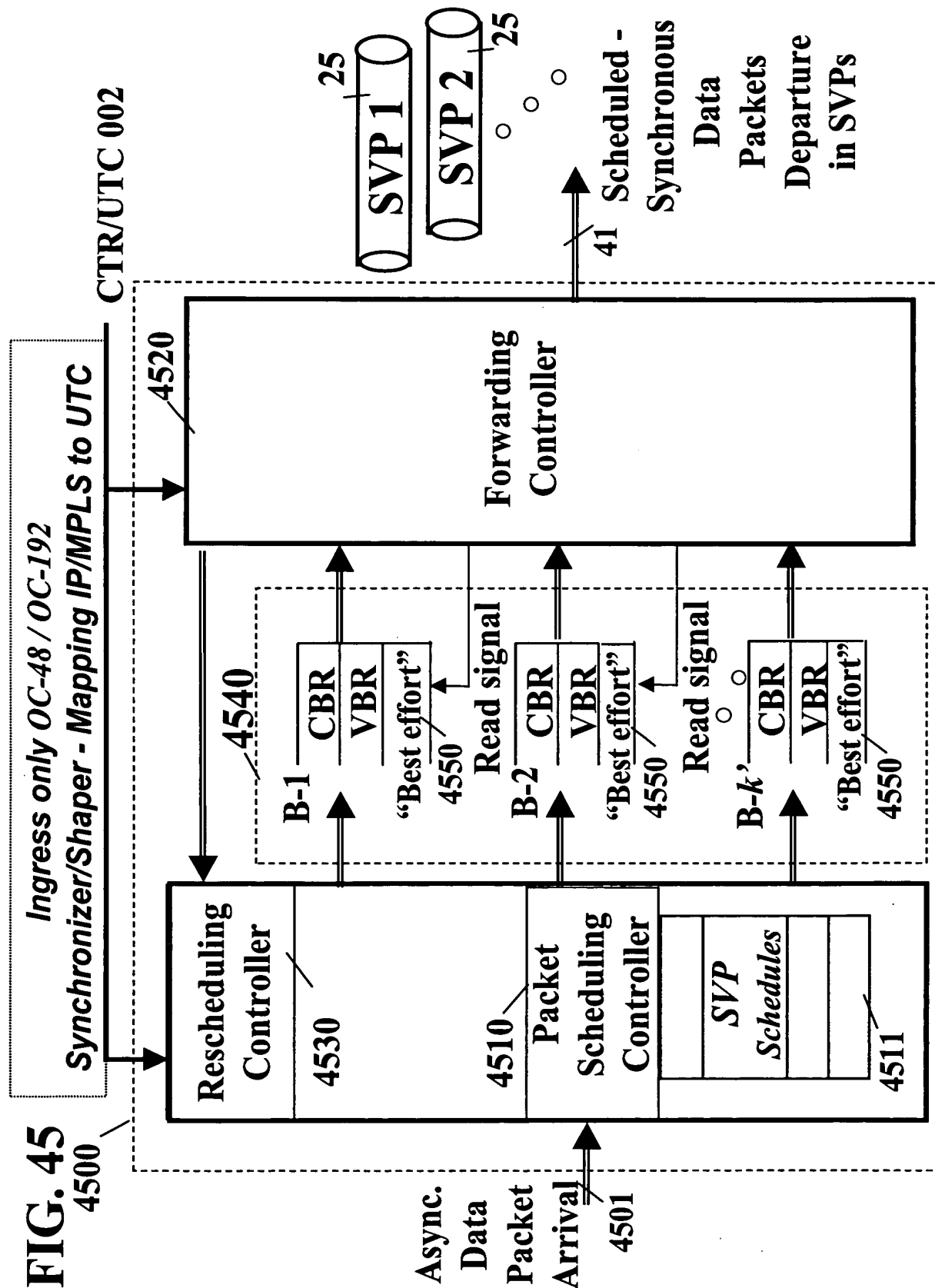
**FIG. 42**

*INPUT PORT  $i$  ( $1 \leq i \leq 16$ )*

Common Time Reference - CTR/UTC 002



**FIG. 45**  
 4500



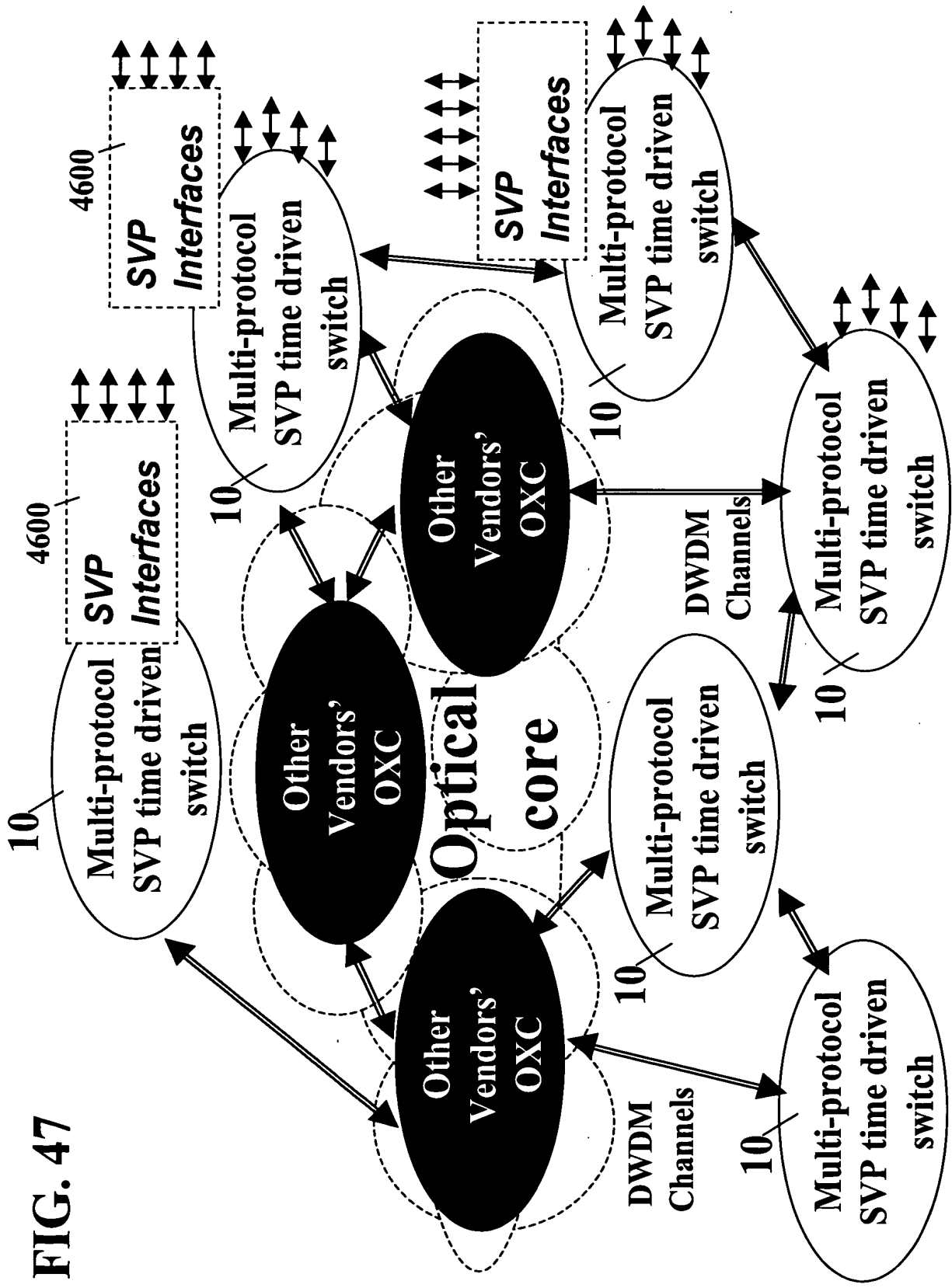
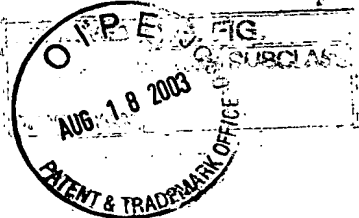


FIG. 47



**FIG. 48**

